

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

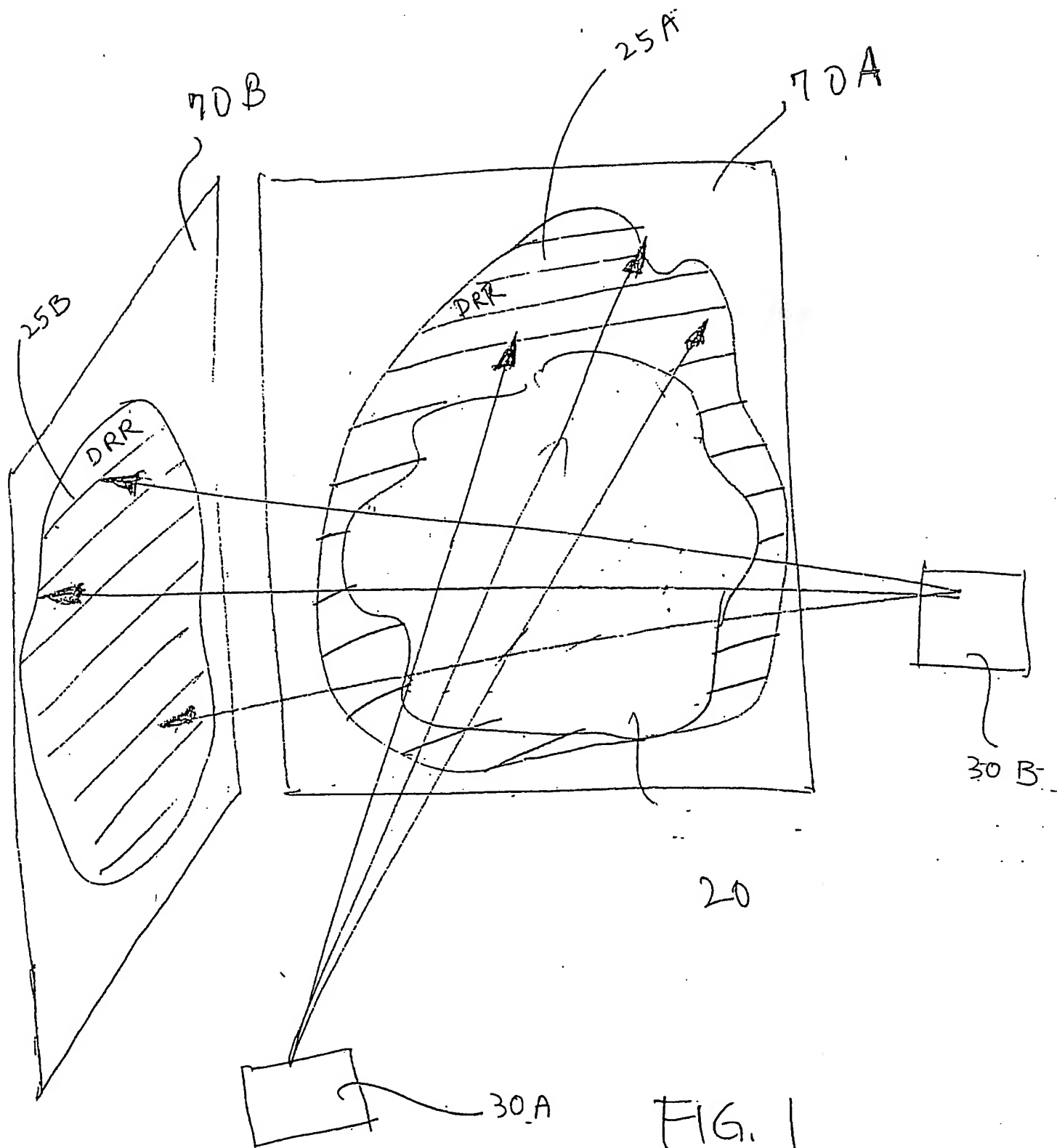


FIG. 1

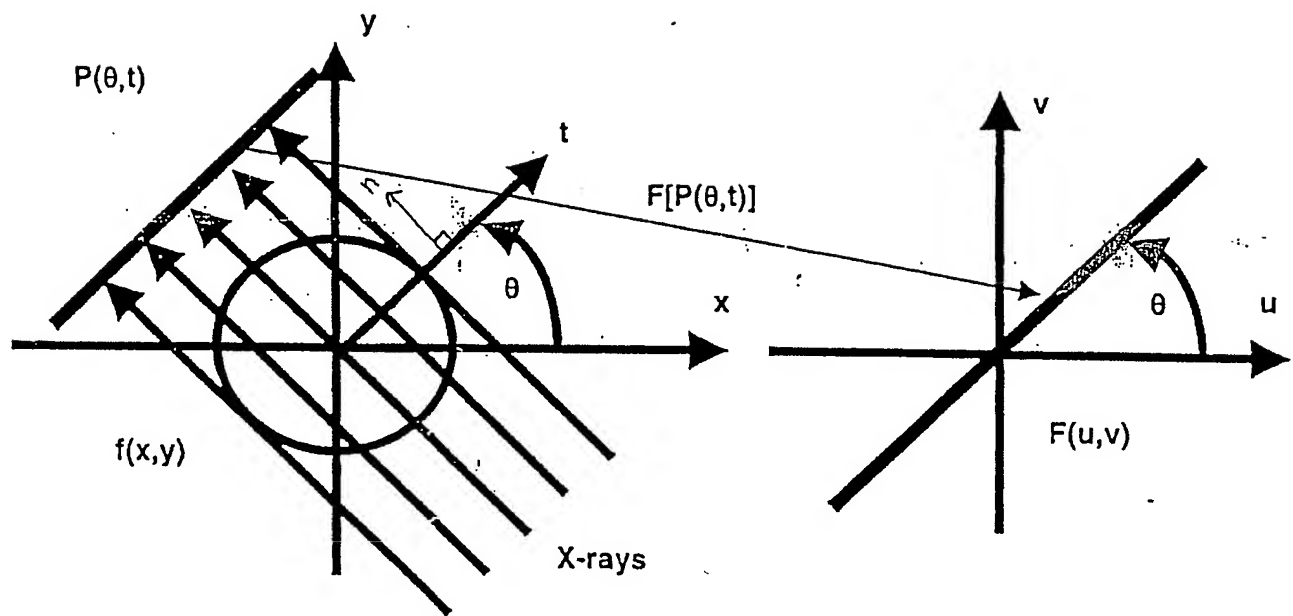


FIG. 2

2D FOURIER SLICE THEOREM

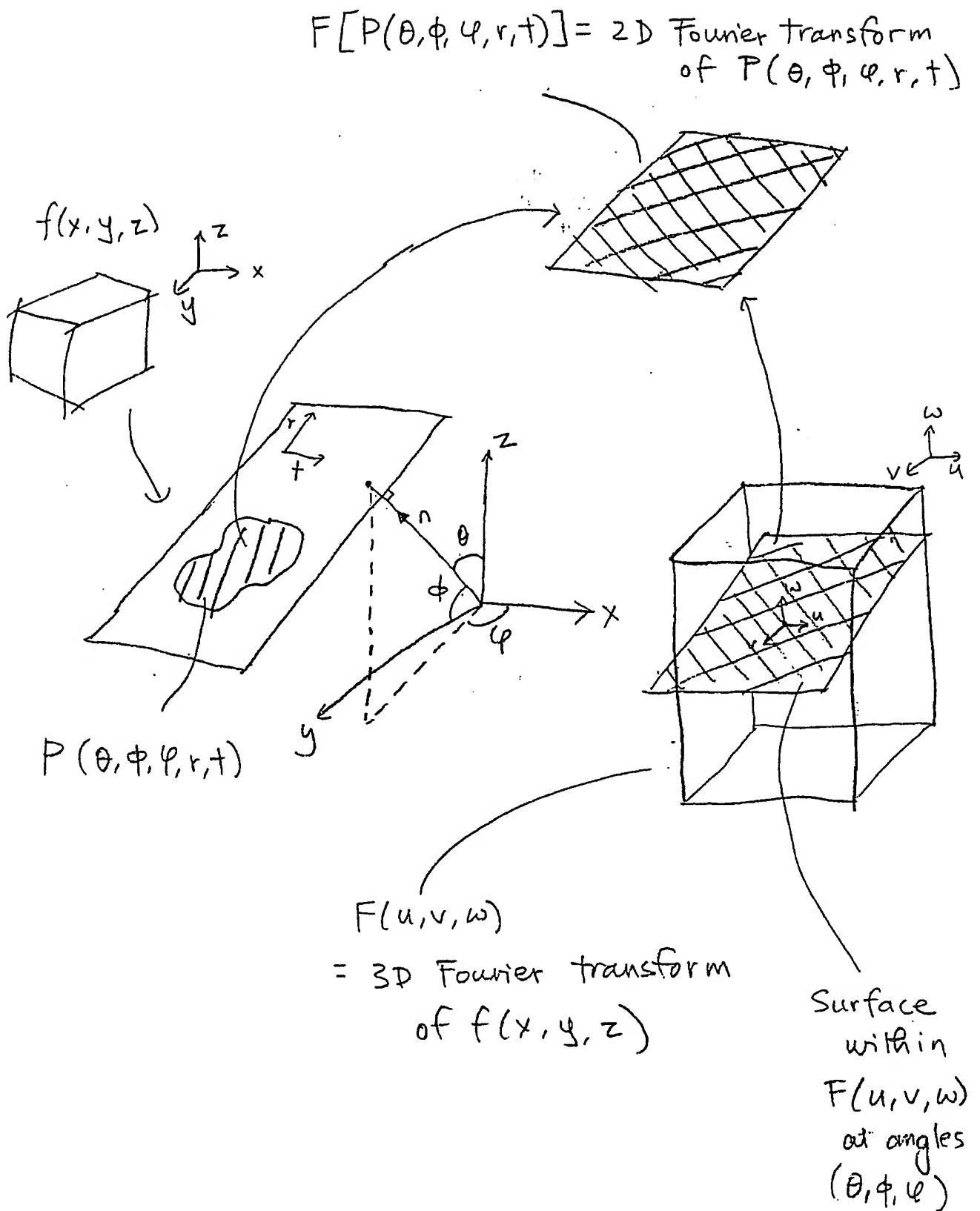


FIG. 3

3D Fourier Slice Theorem

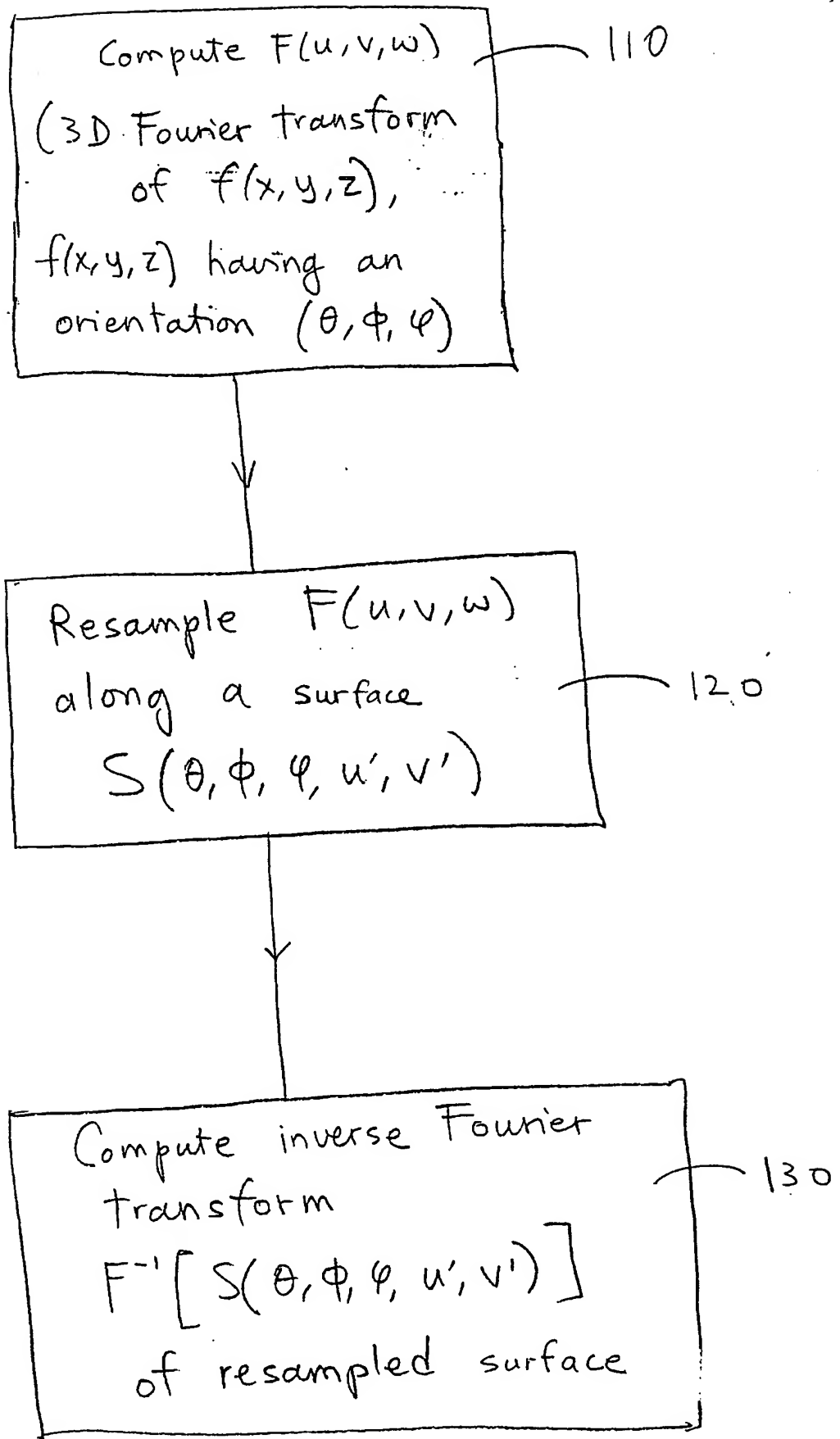
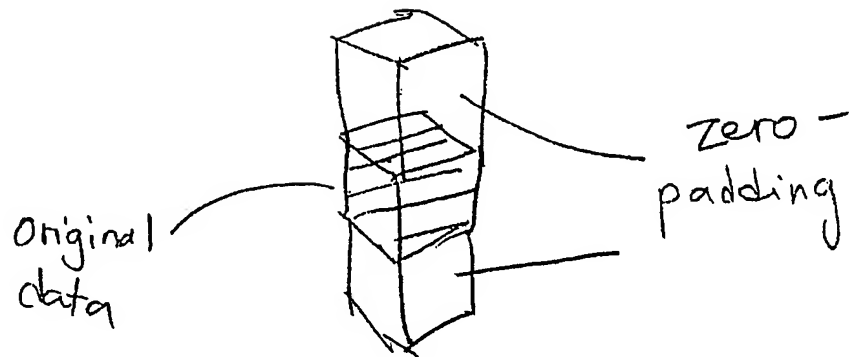
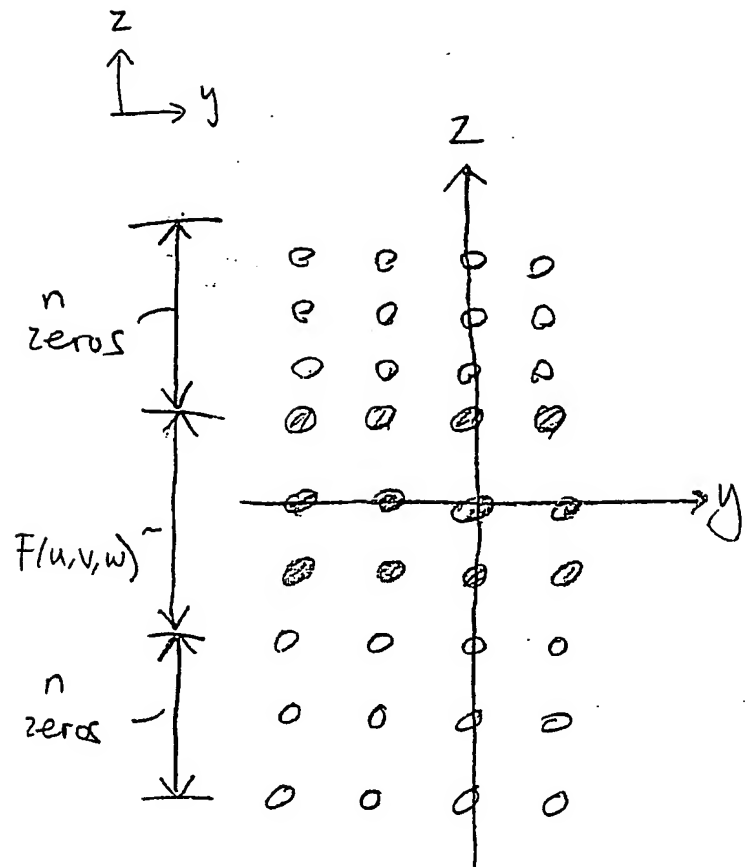
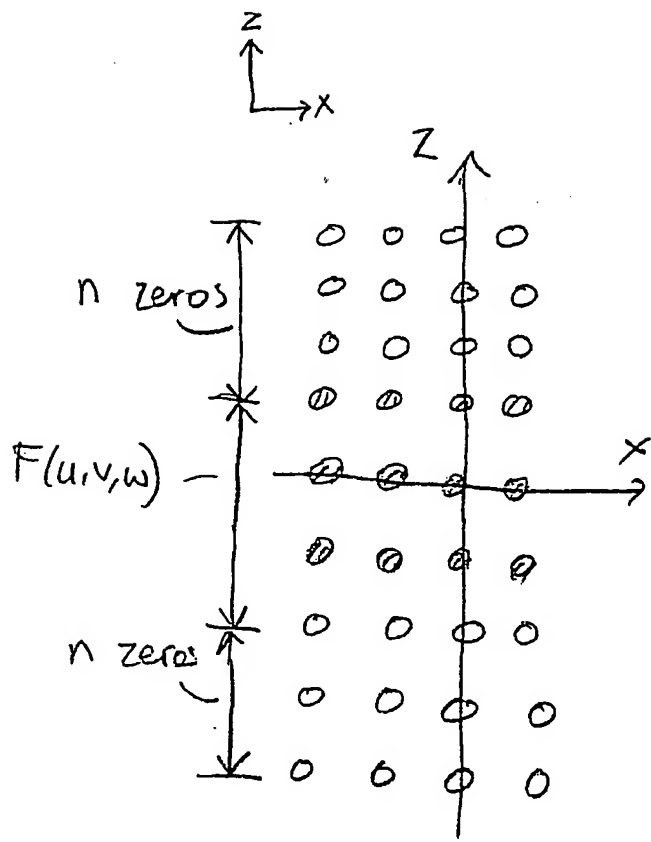
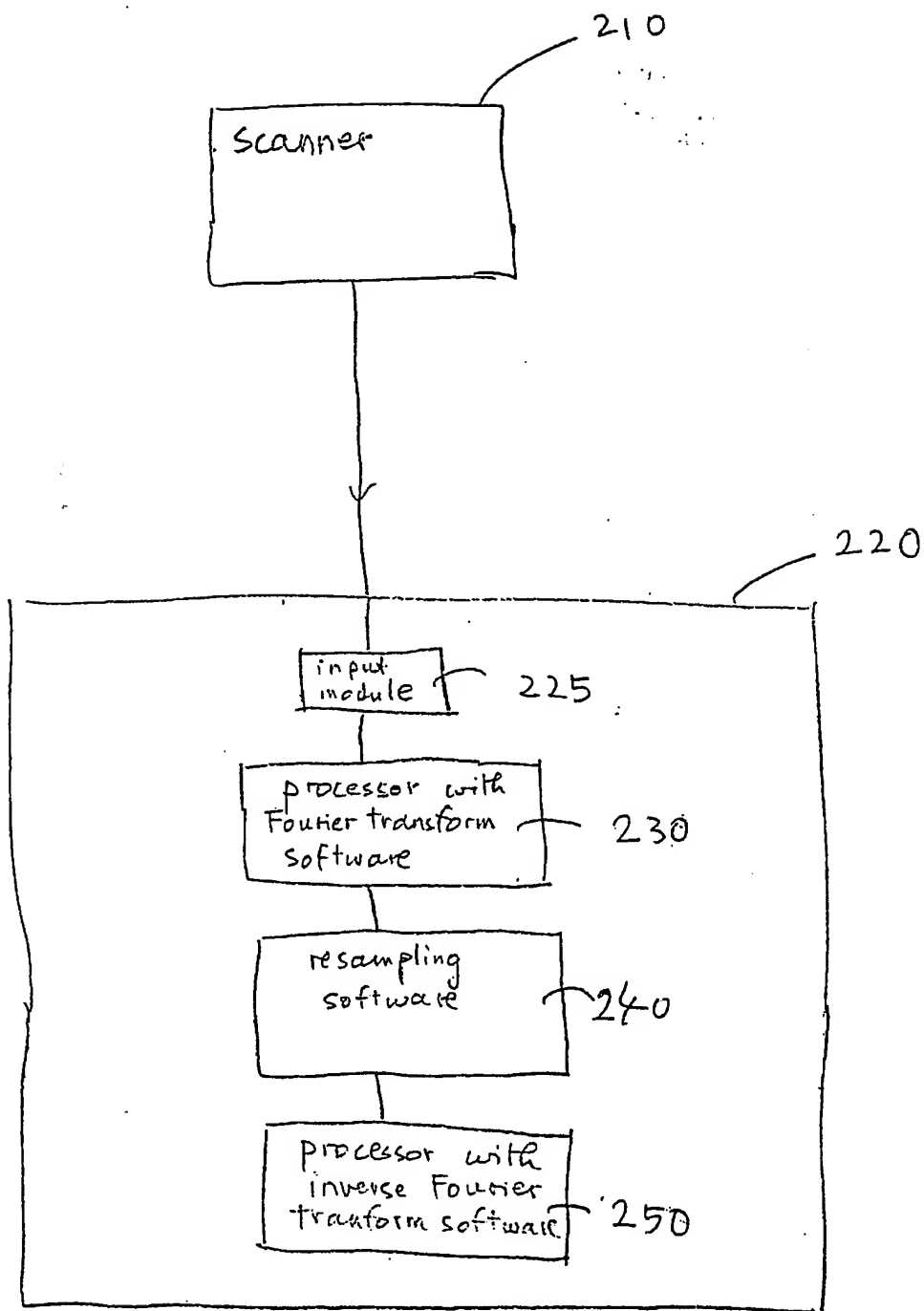


FIG 4





200

FIG. 6

CT Volume (M=N=P)	Computational Complexity (Number of computations)*					Computation advantage for new method ( # of times faster)	
	Current Methods		New Method				
	For each DRR	For 100 DRRs	3-D FFT	For each DRR	For 100 DRRs	For each DRR	For 100 DRRs
32	262144	26214400	491520	18432	2334720	26.67	11.23
64	2097152	209715200	4718592	81920	12910592	57.60	16.24
128	16777216	1677721600	44040192	360448	80084992	122.18	20.95
256	134217728	13421772800	402653184	1572864	559939584	256.00	23.97
512	1073741824	1.07374E+11	3623878656	6815744	4305453056	531.69	24.94

FIG. 7